COIL SURFACE INSULATION TEST.

<u>Please note:</u> Older models of the Imrie 3000 have an **earth** wire from the **High Voltage Black**(-) terminal to the **Probe** socket, this should be removed. This allows insulation testing to be performed on both leads of **Twin Outlet High Tension coils**.

When using the SIMULATORS, be sure there is a wire connecting the COMMON socket to the COIL'S earth or laminations.

<u>Also note</u> that with the wire removed the Spark Gap section of the tester can be used whilst the engine is running, this allows you to check **Reserve Voltage** and engine misfiring. **Start the test with a zero spark gap.**

Surface Insulation testing will detect:

- Cracked spark plug caps.
- Leakage from HIGH TENSION leads.
- Cracks or holes on ignition coil surfaces.

PROCEDURE: (performed during COIL POWER TEST).

- 1. The test leads stay connected as they were for the COIL POWER TEST.
- 2. Select a suitable test lead (any 4mm test lead in good condition, preferably with a stiff insulated but exposed end) into the PROBE socket, situated on the front panel between the HIGH VOLTAGE test leads.
- 3. Set the spark gap to approximately 6mm.
- 4. Switch the power ON.
- 5. Pass the exposed end of the PROBE test lead over the insulating surfaces of the coil, high tension lead and spark plug cap.
- 6. If the insulation is cracked or damaged, a spark discharge will be noticed.
- 7. Do not allow the test probe to linger too long at any point while conducting this test.

NOTE: A faint spark occurring around the coil insulation during probing is a CORONA and does not indicate a faulty coil.